[past the peak]

End of the Binge

The exhaustion of our energy supply may end affluence as we know it.

By James Howard Kunstler

AMONG THE STRANGE delusions and hallucinations gripping the body politic these days is the idea that the so-called global economy is a permanent fixture of the human condition. The seemingly unanimous embrace of this idea in the power circles of America is a marvelous illustration of the madness of crowds, for nothing could be farther from the truth.

The global economy is, in fact, nothing more than a transient set of trade and financial relations based on a particular set of transient, special sociopolitical conditions, namely a few decades of relative world peace between the great powers along with substantial, reliable supplies of predictably cheap fossil fuels. The result, as far as America is concerned, has been an extended fiesta based on suburban comfort, easy motoring, fried food in abundance, universal air conditioning, and bargain-priced imported merchandise acquired on promises to pay later—a way of life described by Vice President Cheney as "non-negotiable."

Of particular concern ought to be the 12,000-mile-long merchandise supply lines from Asia that American retailers such as Wal-Mart depend on and from which American "consumers" (as opposed to citizens, i.e., people with duties, obligations, and responsibilities) get most of their household goods these days. Wal-Mart now gets 70 percent of its products from China.

This fragile calculus plays out against a background of rapidly escalating and increasingly desperate strategic maneuvering around the global oil-production peak and its implications. Peak oil, for short, would unseat the relative peace and cheap-energy basis of our current global arrangements. It is already beginning to happen. Yet most of the discussion about the boon of globalism, especially the virtual cheerleading of New York Times columnist Thomas Friedman, is occurring in complete disregard of the gathering peak-oil crisis. The Left and Right are both equally guilty of epic cluelessness.

Even among those who have heard the term, peak oil is generally misunderstood. It's not about running out of oil. It's about the remorseless decline in production following the all-time worldwide peak and a desperate competition to control the remaining supplies, which happen to be inequitably distributed in a few select regions of the world. The U.S. happens to be one of them, but we are into the twilight of our own supplies. We began production back in 1859, ramped up over many decades to a peak of over 10 million barrels a day in 1970, and have now fallen off to under 5 million barrels a day of conventional crude—with the numbers headed yet more steeply down. We have 28 billion barrels of conventional crude left, and we burn through more than 20 million barrels a day or 7 billion barrels a year. Of that, we import nearly three quarters of the total. The math isn't very reassuring.

Commentators such as Daniel Yergin, author of The Prize, a history of the oil industry, and now head of Cambridge Energy Research Associates, a PR firm serving the major oil companies, like to point to North America's substantial supplies of tar sands (they're up in Canada) and oil shale (it isn't really oil but a hydrocarbon precursor called kerogen). The main catch is that these unconventional sources will yield oil only at high prices, while the procedures for getting them impose additional severe environmental costs including massive water pollution. (In the case of the Rocky Mountain oil shales, the water necessary for processing them in marketable quantities isn't even available.)

Two other linked delusions also tend to queer the public discussion. One is that technology will rescue us from energy scarcity, which is based on the idea that technology can be substituted for energy, that they are virtually interchangeable. This is just a plain misunderstanding of reality. Technology and energy are not the same thing. One does not run without the other. Linked to this is the notion that alternative energy sources—coal, natural gas, solar and wind power, hydrogen, nuclear fission and fusion, bio-fuels, and even some long shots like zero-point energy (ZPE) —will bail us out.

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The truth is that there is not going to be a hydrogen economy because hydrogen requires more energy to produce than you get back. That's why you haven't heard any more about it since President Bush's premature tub-thumping in the 2002 State of the Union address. We have less coal than many people believe, of lower quality, and using it comes with enormous costs related to climate change. Our natural gas supplies are arguably more at risk of depletion than our oil supplies. Wind and solar energy will never produce more than a fraction of what we are currently using, nor can these things do what oil does in transportation. We probably will have to resort to more nuclear-powered electric generation if we want to keep the lights on after 2025, but we're not going to run the interstate highway system on electricity alone nor fly jet planes on U-235. Fusion is still the same energy of the future that it was in 1970. ZPE is a mere hypothesis.

Make no mistake, we will be using many of these things, but they will not replace the benefits we have derived from cheap oil, and they will not in themselves be cheap or plentiful. The bottom line is that no combination of alternative fuels or systems for running them will allow us to run the non-negotiable American Dream the way we are currently running it—or even a substantial portion of it. We are going to have to make other arrangements, and the process will probably include an interval of hardship and discontinuity.

The U.S. oil production peak in 1970 was what led to the OPEC disturbances of that decade, as other nations with younger oil industries discovered that world pricing power had suddenly shifted to them and took advantage of the situation. America went through a harrowing decade of "stagflation" and

related economic woes: high unemployment, inflation, skyrocketing interest rates, tanking industries, asset deflation, gas lines. In response to that trauma, the U.S. and its Western allies desperately brought into production the last great discoveries of the oil age, the North Sea and the arctic region of Alaska. While these developments afforded us some leverage against OPEC and bought us ever more suburban sprawl and its accessories was mostly what we did in America. Subtract it from everything else and there was little left but haircutting and open-heart surgery. The economy wasn't about "information" or buying and selling things on the Internet. It was about bulldozing 200 acres of red clay 38 miles outside Atlanta, plunking McHouses down on half-acre lots, tilting

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some time, they also led to an unfortunate intermezzo of complacency from the mid-1980s into the 2000s during which a world glut of oil briefly materialized, sending prices down as low as \$10 a barrel, in turn leading the American public to fall asleep over energy issues after deciding that the crises of the 1970s had been a shuck-and-jive by greedy oil companies colluding with Arab sheiks. In short, we tragically squandered the opportunity to remake the American Dream along less oiladdicted lines.

Instead, we shifted into party-hearty suburban turbo-development overdrive and elaborated with greater recklessness than ever on a hyper car-dependent living arrangement that was profitable to construct but which has exceedingly poor prospects as an armature for daily life in the decades to come. To make matters worse, we surrendered the bulk of our manufacturing economy to other nations with cheaper labor and fewer environmental scruples and actually made the doomed suburban expansion project, and all its ancillary activities such as mortgage-lending, real-estate sales, strip-mall commerce, and easy motoring, the new basis of our economy. This was the dirty secret of our economy from Reagan on: the creation of up a programmed set of national chain retail outlets on the nearest "collector" highway, granting no-money-down interest-only mortgages to anyone with a pulse regardless of creditworthiness (or lack of), and then flipping those mortgages into yet more abstract tradable securitized debt instruments.

Thus, when the Tom Friedmans and David Brookses of the world beat the drum for the global economy, it is not clear whether they are really talking about international trade relations or the sleazy and destructive rackets that have insidiously replaced the formerly productive activity of the United States -especially insofar as the suburban project can be categorized as the greatest misallocation of resources in the history of the world precisely because it will be so valueless in the future.

It must be obvious, by the way, that this ominous shift from value-based economic activity to the short-term luxury lifestyle racket was supported by both major political parties. Bill Clinton was as much a booster for a suburban-development-based economy as Ronald Reagan or both Bushes—and in some ways, Clinton was more the pure product of a Wal-Mart society than the Republicans ever could be. Nor did Clinton's successors as Democratic presidential candidates deviate from the program. Neither Al Gore nor John Kerry dared stand up against the destructive activities of the suburban "homebuilders" or the idea that America might be imperiling its future by making such massive misinvestments in automobile dependency. Clinton, Gore, and Kerry were equal enthusiasts for the permanent offshoring of industry—in effect, the continued dismantling of America's manufacturing base. (I write as a registered Democrat, incidentally.) None of them paid the slightest attention to the one task that might actually make a difference in America's profligate oil consumption: rebuilding the passenger railroad system to something above its current Third World level of service.

Readers may be justifiably eager to know just when exactly the global oil production peak might occur. There is some disagreement about this across the spectrum, but even that may be insignificant. Authorities such as the Department of Energy's Energy Information Administration and the reporting service for the global oil industry, the International Energy Association, both considered shills for their sponsors, put peak way out around 2030. By any practical policy measure, that is not very far off—though it offers some false consolation for those who would like to avoid thinking about it now. More independent authorities, such as the Association for the Study of Peak Oil, led by eminent geologists such as Colin J. Campbell and Kenneth Deffeyes, retired from the oil "majors" and free to speak their minds, allege that we are at or near peak now. If indeed we are there, we will not know for sure until the production data dribble in and are parsed a year or so down the road.

One unimpeachable authority, Matthew Simmons, the leading U.S. investment banker to the drilling industry, published a book this summer, Twilight in the Desert, saying that evidence indicates Saudi Arabia may have peaked. Saudi reserve figures—an estimate of what remains undergroundhave been considered state secrets for 30 years, since the Saud family nationalized Aramco. A telling symptom of trouble is the failure of Saudi Arabia to increase production to keep the price from ratcheting upward since 2004, despite repeated promises to do so. It would tend to mean there is absolutely no spare oil capacity left in the world that has been seeing stupendous industrial growth.

All this is why the hyper-optimistic view of the global economy as a permanent institution, as something we ought just to embrace and get used to, begins to seem so utterly preposterous. The global energy predicament has powerful implications. For instance, if the supply of oil cannot grow, then industrial economies based on oil (and with no ready substitutes) will not continue to grow. If industrial economies do not grow, then financial instruments generated to represent the expectation of growth—stocks, bonds, derivatives, and currencies will lose credibility and thus value. Economies now functioning on less-thanreality-based expectations, such as America's suburban housing bubble racket, modeled on supernatural credit creation and Ponzi-style multilayered debt foboffs, will find themselves in a bewildering new world of default, loss, and ruin.

The geopolitical implications ought to be daunting too, and rather obvious. For instance, how do we suppose that China and the U.S. will continue to enjoy cozy trade relations at the same time they become desperate rivals contesting for control of the regions that possess the world's dwindling oil supplies? One hardly need point out that the military struggle has already commenced, with the U.S. desperately running its Middle East police station in Iraq, not to mention the Central Asian annexes in Afghanistan and several former Soviet Republics. (Both Uzbekistan and Kyrgyzstan have agitated for America to remove its bases, while China and Russia egg them on in the background.)

So far, China has stopped short of military adventuring, but they have sent agents scurrying around the world to secure oil-supply contracts with many of America's leading suppliers, including Canada and Venezuela, and they are pursuing civil-engineering works all over Africa to forge happy future energy supply relations. China could walk into the oil-rich regions east of the Caspian if they were desperate enough. Would we oppose them? A land war with the Chinese army there would not be a project that America could feel confident about.

And that's just China. Japan and India will have to import virtually all of their energy 10 years from now even to continue their current levels of industrial activity. Perhaps they will just stop. Despite a couple of terror bombings, Europe has pretty much had a free ride on geopolitics since 9/11, enjoying the benefit of America's military exertions to stabilize the Middle East without having to make much more than a token contribution while reveling in a sense of moral superiority, even as they continue to enjoy regular tanker shipments of crucial oil via the Suez Canal. Europeans may seem effete and sclerotic in Beltway strategizing circles, but they are an economic force equal to the U.S., at least, and have the potential both to mobilize and to join in a lot of international military mischief if their survival is threatened.

The peak oil situation implies that we will probably not be able to continue industrial-style agriculture based on

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enormous inputs of oil and gas-based fertilizers, herbicides, and pesticides, and all the fossil fuel associated with such varied tasks as large-scale irrigation and long-range transport. In short, we are going to have to grow a lot more of our food closer to home, on a smaller scale than that now practiced by Cargill, Archer Daniels Midland, and other contributors to the Cheez Doodle and Pepsi-Cola supply. The affluent (those who remain) will be eating far fewer Chilean grapes and tiger shrimp from Thailand.

It's my view that food production and the value-added activities associated with it will come closer to the center of the U.S. economy than they have in memory and at a far smaller and more local scale. Re-allocating land for food production is hardly as automatic or straightforward a process as it may seem. Right now, most of the best land proximate to towns and cities is either already paved over and built upon or valued solely for future suburban development. There will be furious resistance to rethinking that, a kind of cognitive dissonance overhang, as landowners, realtors, builders, and retail-store chains lie back awaiting the return of business as usual.

By the time Americans perceive that the energy problem and the associated food crisis is permanent, there may be desperate cries for the government to "do something." Like all mega-scaled enterprises, the federal government is apt to find itself underfunded and disabled by the sequence of difficulties entailed by the global energy predicament. My guess is that only local government will be effective and that its quality and character will vary from place to place.

Some regions of the country will not even be eligible for a transition from our current mode of life to something more consistent with reality. There is not going to be much local food production in Phoenix and Las Vegas, on top of the problems they will have with non-cheap

air-conditioning, non-easy motoring, and unavailable water. These places may be substantially depopulated 20 years from now. Even if eventually contested by a flow of desperate migrants from Mexico, these metroplexes will not support equivalent populations of any ethnic allegiance years from now.

Small-scale local agriculture will require more physical labor and animal traction in the decades ahead. This has large implications, in turn, for how our society is fundamentally organized or how turbulent it may become. Even the small minority thinking about these things cannot conjure a really credible outcome for the gigantic liability of existing suburbia. Some speculate that the denizens of suburban hot-spots like Cherokee County, Georgia, or northern New Jersey will just live off the gardens on their half-acre lots. Visions like this tend to overlook the other potential failures of suburbia, such as the lack of civic cohesion, the prospects for disorder, and the sheer physical template of sprawl, which turns any two-mile walk into the Bataan Death March.

The permanent global energy crisis will create a large new class of economic losers in the U.S.—the former middle class. A lot of vocational niches are going to disappear and will not come back. Incomes will be lost forever. Members of the former middle class will be angry, resentful, and bewildered by the loss of their entitlements to the American Dream and are apt to chafe at the prospect of becoming agricultural workers. It is impossible to predict what kind of maniacs they may vote for or what their relations might be like with those who manage to continue owning land, except to say that Americans are not so exceptional that they are immune to the social upheavals that typically occur when the mainstream of any society is placed under unprecedented stress.

These issues aren't even on our charts. Our lack of seriousness is impressive.

The shocking conclusion to all this is that we are in for an epochal period of contraction and strife around the world. Industrial economies are likely to wither in the aftermath of peak oil. Scams and rackets that are allowing us to get by now—the extraordinary credit binge of American consumers, the alchemical generation of sub-prime mortgages, and the casino-like operation of hedge funds-will cease to work their magic in a world faced with reality-based hardship and scarcity. The meta-trend in the post-peak-oil world will be the desperate re-localizing and downsizing of all our activities. All things organized at the greatest scale, including global corporations, giant universities, centralized governments, will be weakened, in many cases fatally. Wal-Mart, with its "warehouse on wheels," will expire quickly.

We will be challenged to rebuild complex local networks of economic interdependency, and it will not be easy. The destruction of local communities already wreaked by the big chains has been so comprehensive that it may take decades even to pick up the pieces. There will be far fewer things to buy, and shopping will fade into the background of life. The airline industry as we know it will cease to exist and cars will be, at the least, a much-diminished presence in our lives. Those who believe that life will continue to be an international bluelight special of perpetual bargain shopping are going to be disappointed. The world is about to become a larger place again.

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Volunteer Statesman

Congressman John Duncan, antiwar Republican and authentic conservative

By Bill Kauffman

"DON'T YELP with the pack," William James adjured his students when Spanish-American War fever overtook the Republic.

Hard enough advice for young people to follow, but nearly impossible for most politicians. So when we find a member of Congress smart and brave enough to break from the pack, let us sing his praises so loudly that we drown out the jingo jangles—if not the cries of anguish by American and Iraqi mothers whose sons are dying because too many men and women who knew better yelped with the pack.

John J. "Jimmy" Duncan Jr. of Tennessee was one of the noble sextet of House Republicans who voted against the Iraq War. (The others were Ron Paul, John Hostettler, Amory Houghton, Jim Leach, and Connie Morella.)

The vote, Duncan says as we chat in his Capitol Hill office, was "a tough one for me. I have a very conservative Republican district. My Uncle Joe is one of the most respected judges in Tennessee: when I get in a really serious bind I go to him for advice. I had breakfast with him and my two closest friends and all three told me that I had to vote for the war. It's the only time in my life that I've ever gone against my Uncle Joe's advice. When I pushed that button to vote against the war back in 2002, I thought I might be ending my political career."

He wasn't. Congressman Duncan has won almost 80 percent of the vote in both elections subsequent to his vote against Mr. Bush's war. Not all acts of political courage are suicide.

On the wall of Jimmy Duncan's Knoxville office hangs a framed quotation from Janet Ayer Fairbank's 1930 political novel The Lions' Den: "No matter how the espousal of a lost cause might hurt his prestige in the House, Zimmer had never hesitated to identify himself with it if it seemed to him to be right. He knew only two ways: the right one and the wrong, and if he made a mistake, it was never one of honor: He voted as he believed he should, and although sometimes his voice was raised alone on one side of a question, it was never stifled."

It is a principled maverick's credo, though Duncan's own maverick streak is really an adherence to pre-imperial conservative principles. He is a Robert Taft Republican in a party whose profligate and bellicose foreign policy today melds the worst features of Nelson Rockefeller and Wendell Willkie.

Jimmy Duncan's paternal grandparents were small farmers in Scott County, which in 1861 left Tennessee, refusing to follow the Volunteer State into the Confederacy, and declared itself "the Free and Independent state of Scott."

Duncan is a free and independent member of Congress as well as that even rarer specimen in modern American politics: a man who knows his place, which in this case is Knoxville, Tennessee. His father, John Duncan Sr., "hitchhiked into Knoxville with five dollars in his pocket," and after an education at the University of Tennessee was elected mayor of Knoxville and then congressman.

Duncan's father was also co-owner of the Knoxville Smokies of minor league baseball's Sally League, and Jimmy grew up breathing the invigorating American air of pine tar and resin bags and concession-stand hot dogs. He was a batboy, a ball shagger, scoreboard operator, and, as a freshman at the University of Tennessee, the Smokies' public-address announcer. (Perhaps a boyhood spent in the minors equipped Duncan with the valuable faculty to discern the insidious way in which this war, like all wars, is making our country less neighborly, less American, less minor-league. It is the minors, after all, with their communal atmosphere, grassroots base, and goodnatured acceptance of eccentricity, that represent the best of America. The major leagues—TV-driven, impersonal, corporate, and arrogant—are a sport suitable for American Empire.)

This congressional district has been represented by a Duncan since his father's election in 1964, the year Jimmy, a teenaged Goldwater enthusiast, rode a train for 77 hours to the San Francisco convention to serve as an honorary assistant sergeant-at-arms.

"My Dad was the hardest-working and kindest man I have ever known," he states. "I was very close to him, and very proud of him, but I am sure he has rolled over in his grave at some of my votes because he went straight down the line with the Republican leadership."

I ask Jimmy Duncan how his views on war, peace, and military intervention have changed since he was elected in 1984. "I've become convinced that most